

REMARKS

This is a full and timely response to the outstanding non-final Office Action mailed February 1, 2008. Claims 1-29 are pending in the present application. Reconsideration and allowance of the application and pending claims are respectfully requested.

1. Response to Objections of the Claims

Claim 1 has been objected to as having an informality. Accordingly, the claim has been amended to overcome the objection, and Applicants respectfully request withdrawal of the objection.

2. Response to Rejections of Claims Under 35 U.S.C. § 101

Claim 20 has been rejected under 35 U.S.C. § 101 as allegedly being directed to non-statutory subject matter. Claim 20 has been amended to recite a computer readable storage medium which is statutory subject matter. Accordingly, withdrawal of the rejection of claim 20 is respectfully requested.

Claims 1-29 have also been rejected under 35 U.S.C. § 101 as allegedly being directed to non-statutory subject matter. The Office Action states that the method claims are non-statutory, since they may be performed by a computer program code. Applicants respectfully traverse the rejection. Applicants note that a method is a recognized classification of statutory subject matter. Further, the MPEP cites "A computerized method of optimally controlling transfer, storage and retrieval of data between cache and hard disk storage devices such that the most frequently used data is readily available" and "A method of controlling parallel processors to accomplish multi-tasking of several computing tasks to maximize computing efficiency" as examples of statutory method claims. See MPEP 2106 and *In re Bernhart*, 417 F.2d 1395, 1400, 163 USPQ 611,616 (CCPA 1969). Likewise, a method of controlling a local process that forms part of a first processing entity, said first processing entity maintaining a plurality of associations with a plurality of remote processes in a second processing entity, as described in claim 1, is also statutory subject matter.

Therefore, Applicants respectfully submit that claims 1-29 comply with 35 U.S.C. § 101 and Applicants respectfully request withdrawal of the rejection of claims 1-29.

3. Response To Rejections of Claims Under 35 U.S.C. § 103

Claims 1-8 and 16-21 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over *Roque* (U.S. Patent Publication No. 2002/0186687 A1) in view of *Sun* (U.S. Patent Publication No. 2002/0188650 A1). Claims 9-12 and 14-15 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over *Roque* in view of *Sun* in further view of *Performance Technologies* ("Tutorial: Interworking Switched Circuit and Voice-over-IP Networks," August 22, 2001). Claims 13 and 22-29 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over *Roque* in view of *Sun* in further view of *Performance Technologies* in further view of *Suzuki* (U.S. Patent Publication No. 2002/0156925 A1).

a. Claim 1

As provided in independent claim 1, Applicants claim:

A method of controlling a local process that forms part of a first processing entity, said first processing entity maintaining a plurality of associations with a plurality of remote processes in a second processing entity, said method comprising the steps of:

- receiving a failure message from a remote process indicating a fault affecting an association linking the local process with that remote process;
- queuing data messages destined for that remote process;
- ***controlling the transmission of an acknowledgement of the failure message so that data messages pending on the association are received at that remote process before the acknowledgment of the failure message; and***
- ***initiating a traffic diversion to set up an alternate path between said first processing entity and said second processing entity for queued data messages.***

(Emphasis added).

Applicants respectfully submit that independent claim 1 is allowable for at least the reason that *Roque* in view of *Sun* does not disclose, teach, or suggest at least "controlling the transmission of an acknowledgement of the failure message so that

data messages pending on the association are received at that remote process before the acknowledgment of the failure message” and “initiating a traffic diversion to set up an alternate path between said first processing entity and said second processing entity for queued data messages,” as emphasized above.

For example, *Roque* describes a process for an application server process (ASP) to manage a withdrawal of service by a signalling gateway process (SGP). In this process, an SGP may send a “set of messages that will convey SGP state maintenance and SGP traffic maintenance events . . . related to an SGP . . . to an ASP.” Para. 0201. The ASP may also send notifications related to a status of a Signalling Gateway (SG) (including SGPs for the SG) to the SGPs that serve the SG. See para. 0218. Accordingly, *Roque* discloses the conveying of a status of an SGP, such as whether an SGP is down or inactive. For example, *Roque* states:

[0385] When an ASP (e.g.: ASP-X) receives an SGPIA or an SGPDOWN message from an SGP (e.g.: SGP-A), first, if its status was "SGP_ACTIVE" it has to stop traffic (signaling traffic messages) towards such SGP and do not expect receive any traffic (signaling traffic messages) coming from such SGP.

[0386] Then, after updating the status for the sending SGP and updating, if proceeds, the status of the affected SG(s), the receiving ASP will have to fetch in the storing means (64) an alternative SGP (e.g.: SGP-C) that is currently serving, or can serve, the SG(s) that became unattended by the sending SGP (SGP-A).

[0387] If such alternative SGP is found and its status is "SGP_ACTIVE", then such SGP shall, from now, be used for signaling traffic messages related to such affected SG(s).

[0388] Otherwise, the sending of signaling traffic messages related to the affected SG(s) is temporarily stopped until the receiving ASP (ASP-X) starts and complete an activation procedure towards one (or more) alternative SGP(s) that can serve traffic related to the affected SG(s) (i.e.: SGP(s) that are configured to serve such SG(s) that became unattended).

As such, the disclosure of *Roque* is not directed to “controlling the transmission of an acknowledgement of the failure message so that data messages pending on the association are received at that remote process before the acknowledgment of the

failure message” and “initiating a traffic diversion to set up an alternate path between said first processing entity and said second processing entity for queued data messages,” as recited in claim 1.

For example, *Roque* does not disclose that queued or pending data messages are diverted or that an acknowledgement of the failure message is controlled so that data messages pending on the association are received at a remote process before an acknowledgment of a failure message. Further, *Sun* describes the delaying of an acknowledgement message to a client process until completion of a requested task is performed. See para. 0037. As such, *Sun* does not disclose that queued or pending data messages are diverted or that an acknowledgement of the failure message is controlled so that data messages pending on the association are received at a remote process before an acknowledgment of a failure message. Therefore, *Sun* individually or in combination with *Roque* fails to teach or suggest at least “controlling the transmission of an acknowledgement of the failure message so that data messages pending on the association are received at that remote process before the acknowledgment of the failure message” and “initiating a traffic diversion to set up an alternate path between said first processing entity and said second processing entity for queued data messages,” as recited in claim 1.

Therefore, claim 1 is patentable over *Roque* in view of *Sun*, and withdrawal of the rejection is respectfully requested.

b. Claims 2-21

For at least the reasons given above, claim 1 is allowable over the cited art of record. Since claims 2-8 and 16-21 depend from and include the features of claim 1 and recite additional features, claims 2-8 and 16-21 are allowable as a matter of law over the cited art.

Performance Technologies fails to remedy the deficiencies of *Roque* and *Sun* with respect to independent claim 1. Therefore, since claims 9-12 and 14-15 depend from and include the features of claim 1 and recite additional features, claims 9-12 and 14-15 are allowable as a matter of law over the cited art.

As an example, claim 9 describes that an alternative local process to the same remote process is provided when a pending message is determined to form part of a stateful transaction. Diversely, *Roque* describes that an alternative signaling gateway process is designated and does not disclose that an alternative local process may be provided to a same remote process (e.g., signaling gateway process in accordance with the Examiner's construction of "remote process").

Suzuki fails to remedy the deficiencies of *Roque*, *Sun*, and *Performance Technologies* with respect to independent claim 1. Therefore, since claim 13 depends from and includes the features of claim 1 and recites additional features, claim 13 is allowable as a matter of law over the cited art.

c. Claim 22

As provided in independent claim 22, Applicants claim:

A method of recovering failure in a distributed signalling gateway maintaining a plurality of associations between signalling gateway processes of said distributed signalling gateway and application server processes of an application server, said method comprising the steps of:

- initiating a traffic diversion in response to a failure message to set up an alternate path between said signalling gateway processes and said application server processes in case of fault affecting an association;
- initiating a switch back to include a new association linking a signalling gateway process and an application server process;
- ***according to the change of status of any association, updating routing tables capable of routing data messages received by said signalling gateway processes to its destined application server processes; and***
- ***distributing sequentially messages from said signalling gateway to said plurality of application server processes according to said routing tables.***

(Emphasis added).

Applicants respectfully submit that independent claim 22 is allowable for at least the reason that *Roque* in view of *Sun* in further view of *Performance Technologies* in further view of *Suzuki* does not disclose, teach, or suggest at least "according to the change of status of any association, updating routing tables capable of routing data

messages received by said signalling gateway processes to its destined application server processes” and “distributing sequentially messages from said signalling gateway to said plurality of application server processes according to said routing tables,” as emphasized above.

For example, *Roque* describes a process for an application server process (ASP) to manage a withdrawal of service by a signalling gateway process (SGP). In this process, an SGP may send a “set of messages that will convey SGP state maintenance and SGP traffic maintenance events . . . related to an SGP . . . to an ASP.” Para. 0201. The ASP may also send notifications related to a status of a Signalling Gateway (SG) (including SGPs for the SG) to the SGPs that serve the SG. See para. 0218. As such, the disclosure of *Roque* is not directed to routing data messages received by a signaling gateway to an application server. Rather, *Roque* describes that the status information for a SG is the basis used to route traffic from an ASP to a SG. See para. 0252. Accordingly, *Roque* fails to teach or suggest “according to the change of status of any association, updating routing tables capable of routing data messages received by said signalling gateway processes to its destined application server processes” and “distributing sequentially messages from said signalling gateway to said plurality of application server processes according to said routing tables,” as recited in claim 22.

Further, *Sun* describes the delaying of an acknowledgement message to a client process until completion of a requested task is performed. See para. 0037. As such, *Sun* does not disclose that queued or pending data messages are diverted or that an acknowledgement of the failure message is controlled so that data messages pending on the association are received at a remote process before an acknowledgment of a failure message. Therefore, *Sun* individually or in combination with *Roque* fails to teach or suggest at least “according to the change of status of any association, updating routing tables capable of routing data messages received by said signalling gateway processes to its destined application server processes” and “distributing sequentially messages from said signalling gateway to said plurality of application server processes according to said routing tables,” as emphasized above,” as recited in claim 22.

Also, *Performance Technologies* describes the interworkings of a public switched telephone network and voice-over-Internet Protocol (VoIP) network. *Performance Technologies* does not disclose that queued or pending data messages are diverted or that an acknowledgement of the failure message is controlled so that data messages pending on the association are received at a remote process before an acknowledgment of a failure message. Therefore, *Performance Technologies* individually or in combination with *Roque* and *Sun* fails to teach or suggest at least “according to the change of status of any association, updating routing tables capable of routing data messages received by said signalling gateway processes to its destined application server processes” and “distributing sequentially messages from said signalling gateway to said plurality of application server processes according to said routing tables,” as emphasized above,” as recited in claim 22.

Further, *Suzuki* describes the registration of a gateway or an agent when one is added to a network and signaling that may occur between a signaling gateway and a call agent. *Suzuki* does not disclose that queued or pending data messages are diverted or that an acknowledgement of the failure message is controlled so that data messages pending on the association are received at a remote process before an acknowledgment of a failure message. Therefore, *Suzuki* individually or in combination with *Roque*, *Sun*, and *Performance Technologies* fails to teach or suggest at least “according to the change of status of any association, updating routing tables capable of routing data messages received by said signalling gateway processes to its destined application server processes” and “distributing sequentially messages from said signalling gateway to said plurality of application server processes according to said routing tables,” as emphasized above,” as recited in claim 22.

Therefore, claim 22 is patentable over *Roque* in view of *Sun* in further view of *Performance Technologies* in further view of *Suzuki*, and withdrawal of the rejection is respectfully requested.

b. Claims 23-29

For at least the reasons given above, claim 22 is allowable over the cited art of record. Since claims 23-29 depend from and include the features of claim 22 and recite additional features, claims 23-29 are allowable as a matter of law over the cited art.

As an example, claim 23 describes "finding alternate path to forward subsequent stateless processing messages onto another application server process through another association or to forward subsequent stateful processing messages through an alternate signalling gateway process still associated with the same application server process." Diversely, *Roque* describes that an alternative signaling gateway process is designated and does not disclose that a different forwarding operations may be performed based on the stateless or stateful nature of processing messages. Accordingly, the subject matter of claim 23 is not taught by the cited art.

CONCLUSION

For at least the reasons set forth above, Applicants respectfully submit that all objections and/or rejections have been traversed, rendered moot, and/or accommodated, and that the pending claims are in condition for allowance. Favorable reconsideration and allowance of the present application and all pending claims are hereby courteously requested. If, in the opinion of the Examiner, a telephonic conference would expedite the examination of this matter, the Examiner is invited to call the undersigned agent at (770) 933-9500.

Respectfully submitted,



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